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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,417	06/26/2003	Arun V. Shastry	02280.003530.	4883

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EXAMINER

FAISON GEL, VERONICA FAYE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

09/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/606,417

**Applicant(s)**

SHAstry ET AL.

**Examiner**

VERONICA FAISON GEE

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-5, 7, 8, 10-17, 19, 20, 22, 23, 25, 28-30, 33, 34 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5, 7, 8, 10-17, 19, 20, 22, 23, 25, 28-30, 33, 34, and 37-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 7, 8, 10-17, 19, 20, 22, 23, 25, 28-30, 33, 34, and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reitnauer et al (2003/0101902) in view of Kojima et al (US Patent 6,450,615) in further view of Brachman et al. (US Patent 5,464,470 ).

Reitnauer et al teaches a method for forming a mark on a food product wherein the ink composition comprises a wax and colorant, and may further comprise a resin and antioxidant (abstract and page 1 para. 0011). The reference further teaches that the resolution of the mark can be at least 50 dpi and the food product may be an egg, cheese, fruit or a confectionary (page 1 para. 0008-0009). The wax may be selected from beeswax, candelilla wax, carnauba wax, polyethylene glycol and cocoa butter wherein the wax is present in the amount of 50 to 99 percent by weight (page 2 para. 0019-0020). The colorant may include a pigment or dye (page 2 para. 0025-0026), specifically FD&C Green no. 3, FD&C Blue no.1 and 2, FD&C Red no 40 and FD&C yellow no. 6 all of which are disclosed by Applicant specification in paragraph 0027. The ink composition may further comprise a stabilizer (page 2 para. 0027). The ink composition may include other conventional hot melt ink components, wherein the

amount of the components may be included in the ink to provide the desired viscosity (page 3 para. 0030). Reitnauer et al also teaches that the ink may be used in a conventional hot melt ink jet printer, piezoelectric printer (page 3 para. 0033-0034). Reitnauer et al fail to teach the specific printing method.

Kojima et al teaches a droplet ejection apparatus that may be used with various types of ink compositions (abstract). The reference further teaches that the printing apparatus has a resolution of 300 dpi or higher (col. 2 lines 39-50). The reference discloses that in general ink used for a droplet ejection apparatus has a viscosity of 8 to 15 cp in the case of a hot melt ink composition and the surface tension for any of the inks would be in the range between 10 and 70 dyne/cm (col. 3 lines 26-31).

Therefore it would have been obvious to one of ordinary skill in the art to use the ink composition as taught by Reitnauer et al in the apparatus of Kojima, because Kojima apparatus may be used with hot melt ink compositions like that taught by Reitnauer et al.

Brachman et al teaches the first composition comprises wax, a dye which is other than Leuco dye, and a solvent capable of solubilizing the dye. (abstract, col. 3, lines 58-61). The reference further teaches a blend of paraffin present in an amount up to about 70 wt. %, stearyl alcohol and stearamide can be used, although it is preferred that stearamide not be used as it can slow the rate of color change. (col. 4 lines 12-14, 24-26). The reference further teaches that the dye is present in the amount of 0.1 wt. % to about 5 wt. %. ( col. 5, lines 48-50). The solvent used must be one that is capable of solubilizing the dye, preferably a polar since the preferred dye is water-and/or alcohol-

soluble dye. A preferred solvent is water and/or glycerol or a combination of water and N-methylpyrrolidone. The solvent is present in the amount from about 0.5 wt. % to about 3 wt. % ( col. 6, lines 19-28).

Therefore it would have been obvious to one of ordinary skill in the art that the amount of solvent present in Reitnauer is sufficient enough to dissolve the water-soluble dye as taught by Brachman.

### ***Response to Arguments***

Applicant's arguments filed 7-14-08 have been fully considered but they are not persuasive.

Applicant's argues that glycerin and propylene glycol are processing aids and one of ordinary skill in the art would understand that these processing aids would be used in minor amount and that Reitnauer does not teach a water-soluble colorant dissolved in a fat or wax dispersible carrier for the colorant.

However, it is the position of the Examiner that although glycerin and propylene glycol are used in minor amount that it is still enough to dissolve the water-soluble dye present in Reitnauer, as shown by Brachman wherein a solvent is present in the amount of 0.5 to 3 weight percent to dissolve a water-soluble dye present in the amount of 0.1 to 5 weight percent that is used in a wax based composition.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERONICA FAISON GEE whose telephone number is

(571)272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerry A Lorengo/  
Supervisory Patent Examiner, Art Unit 1793

/V. F. G./  
Examiner, Art Unit 1793